

AMENDMENTS TO THE SPECIFICATION

Please insert the following subheadings below, beginning at page 1, lines 3-14

Background of the Invention

(1) Field of the Invention

The invention relates to a method for the production of antifalsification identification elements having a color tilting effect caused by metallic clusters separated from a mirror layer across a defined transparent layer.

(2) Description of Related Art

WO 02/18155 discloses a method for the antifalsification marking of objects, the object being provided with a marking comprised of a first layer reflecting electromagnetic waves, onto which an inert layer, transparent to electromagnetic waves, of defined thickness is applied, and this inert layer is succeeded by a third layer formed of metallic clusters.

Brief Summary of the Invention

The invention addresses the problem of providing a method for the production of antifalsification identification elements on flexible materials, the property of security against falsification being provided by a visible color change at different viewing angles (tilting effect), which is also to be machine-readable. In the spectrum read out by machine the production method is to be coded unambiguously.

Please amend the paragraph beginning on page 1, line 21 as follows:

~~Subject-~~The subject matter of the invention is therefore a method for the production of antifalsification identification elements, each comprised of at least one layer reflecting electromagnetic waves, a spacer layer and a layer formed of metallic clusters, wherein onto a carrier substrate ~~is applied a partial or all-over layer reflecting electromagnetic waves~~ is applied.

and subsequently one or several partial and/or all-over polymeric layers of defined thickness are applied, whereupon onto the spacer layer a layer, formed of metallic clusters, is applied which are produced by means of a method using vacuum technology or out of systems based on solvents.

Please amend the paragraph beginning on page 2, line 25 as follows:

For a partial application is especially suitable a method A method utilizing a soluble color coating for the production of the partial metallization is especially suitable for a partial application. In this method in a first step a color coating soluble in a solvent is applied onto the carrier substrate, in a second step this layer is optionally treated by means of an inline plasma, corona or flame process, and, in a third step, a layer of the metal or metal alloy to be structured is applied, whereupon in a fourth step the color coating is removed by means of a solvent, optionally combined with mechanical action.

Please amend the paragraph beginning on page 9, line 4 as follows:

In order to set electrical properties, for example conductivity, ~~can be added for example~~ graphite, carbon black, conductive organic or inorganic polymers, metal pigments (for example copper, aluminum, silver, gold, iron, chromium, lead and the like) can be added, by way of example. Metal alloys such as copper-zinc or copper-aluminum or their sulfides or oxides or also amorphous or crystalline ceramic pigments such as ITO and the like. Furthermore also doped or nondoped semiconductors, such as for example silicon, germanium or ionic conductors, such as amorphous or crystalline metal oxides or metal sulfides, can be utilized as additives. Further, to set the electrical properties of the layer, polar or partially polar compounds, such as tensides, or nonpolar compounds, such as silicone additives or hygroscopic or nonhygroscopic salts can be utilized or added.

Please amend the paragraph beginning on page 9, line 19 as follows:

The optical properties of the layer can be affected by visible coloring substances or pigments, luminescent coloring substances or pigments, which fluoresce or phosphoresce in the visible range, the UV range or in the IR range, effect pigments, such as liquid crystals, pearlescent pigments, bronzes and/or heat-sensitive colors or pigments. These can be employed in all conceivable combinations. In addition, phosphorescent pigments alone or in combination with other color substances and/or pigments can be utilized.

Please amend the paragraph beginning on page 11, line 17 as follows:

In order to increase the security against falsification, these sealing adhesives can be equipped with visible features, with features visible under UV light, or fluorescent or phosphorescent or those absorbing laser and IR ~~radiation, -radiation~~. These features can also be in the form of patterns or signs or symbols or they can exhibit color effects, and, in principle, any desired number of colors, preferably 1 to 10 colors or color mixtures, are possible for use.

Please insert the following subheading below, beginning at page 12, line 15

Brief Description of the Drawings

- Fig. 1 shows a schematic cross sectional view of a first permanently visible marking on a carrier substrate,
- Fig. 2 a schematic cross sectional view of a not permanently visible first marking on a carrier substrate as well as a second carrier substrate suitable for proof or for visualization,
- Fig. 3 a schematic cross sectional view of a permanently visible first laminatable or adhesible marking,

- Fig. 4 a schematic cross sectional view of a further permanently visible second laminatable or adhesible marking,
- Fig. 5 a schematic cross sectional view of a not permanently visible first laminatable or adhesible marking as well as a second carrier substrate suitable for proof or for visualization,
- Fig. 6 a falsification-proof marked carrier substrate, coated in continuous

Please insert the following subheading below, beginning at page 13, line 2

Detailed Description of the Invention

In the markings shown in Fig. 1 to 5, a first layer reflecting electromagnetic waves is denoted by (2). This can be a thin layer comprised of, for example, aluminum. However, the first layer (2) can also be a layer formed of metallic clusters, which is applied onto a carrier (1). The carrier (1) can be a carrier substrate to be marked. The inert spacer layer is denoted by (3). The metallic clusters (4) are usefully produced for example of copper.